

Technical Assistance: CRS Training/Evaluations Summary 2020-2021

In 2021, Wetlands Watch provided three intensive five-hour trainings on the National Flood Insurance Program's Community Rating System for local government staff across Virginia's Coastal Zone. These trainings were conducted in response to new interest from local governments after Wetlands Watch completed twelve trainings in 2019, funded by a grant from the Virginia Coastal Zone Management Program. The goal of these trainings was to increase local government staff knowledge and interest in the CRS Program, while offering an opportunity for staff to gain a head start on the application process to join the Program. The training also included a comprehensive review of community actions to determine an estimated CRS class rating and corresponding flood insurance premium discount savings across the community. The following communities received this training on the following dates:

- Town of Smithfield October 12, 2021
- Town of Dumfries October 14, 2021
- Town of Colonial Beach November 12, 2021

The trainings included the following agenda: An overview of basic National Flood Insurance Program (NFIP) principals (including an update on the NFIP's new flood insurance premium rating methodology), a detailed CRS Program review, in-depth explanations of credit requirements and documentation for three sample CRS Program activities, a profile of the CRS Program across the country and in the state of Virginia, examples of resources and support available for CRS Program administration, a discussion of the costs and benefits of joining the CRS using Wetlands Watch's Report, "The Costs & Benefits of the CRS Program in Virginia" (2017) in combination with the potential cost savings for each community, the creation of an interdepartmental CRS Team, and a comprehensive review of community actions and staff designations to help determine an estimated CRS Program class rating and corresponding savings.

All local government staff from each training received the following deliverables:

- CRS Training PowerPoint Presentation (PDF)
- CRS Team Departmental Chart (PDF)
- CRS Detailed Quick Check (Excel): This document includes detailed information shared during the training by community staff regarding CRS activities. If the community decides to join the CRS Program, this will not be submitted to FEMA, but will be extremely helpful as the community staff prepares for the in-person meeting with ISO.
- CRS Quick Check for FEMA/ISO (PDF): Local staff would send this document to FEMA/ ISO in the event the community decides to initiate the process to join the CRS.
- CRS Training Summary Report (PDF): Local staff could offer this marketing document to a decision-making board as the community decides whether to join the CRS. The summary report includes an estimated CRS class rating and corresponding flood insurance premium percentage savings for the community.

The 2021 trainings provided nearly identical deliverables to those conducted in 2019, with the exception of one change to the CRS Training Summary Report. The new rating methodology adopted by the National Flood Insurance Program, called Risk Rating 2.0, is effective in spring 2022. When the new rating system is in full force, all flood insurance premiums will change, therefore making it impossible to estimate a total cost savings for each community that undergoes the CRS training. Not only will the rating methodology modify premium amounts, but many flood insurance policies will begin receiving the CRS discount for the first time under Risk Rating 2.0, rendering the "CRS What-Ifs," from which our savings estimate is calculated, unusable.

A sample of the training deliverables are included in the pages that follow.

This report, Task 92.03, was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant FY20 # NA20NOS4190207 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Prepared by Mary-Carson Stiff: Policy Director, Wetlands Watch



THE NATIONAL FLOOD INSURANCE PROGRAM'S COMMUNITY RATING SYSTEM (CRS) PROGRAM WORKSHOP SUMMARY REPORT

Wetlands Watch conducted a CRS Workshop training for the Town of Smithfield staff on October 12, 2021. This training provided an in-depth review of the National Flood Insurance Program's Community Rating System (CRS) Program and included a preliminary evaluation of flood reduction activities currently underway in the Town that are potentially eligible for CRS credit. Wetlands Watch generated an estimated CRS credit rating based on those credit earning activities reported by workshop attendees.

The CRS credit rating determines how much money all national flood insurance policyholders could expect to save on their flood insurance premiums each year if the Town of Smithfield decided to join the CRS Program. Due to a new insurance rating methodology, Risk Rating 2.0, corresponding annual savings for the Town are not available at this time, but should be released in spring 2022.

Potential CRS Rating: Class 8

10% annual discount



WWW.WETLANDSWATCH.ORG

<u>Disclaimer</u>: The estimated CRS class rating reflects activities occurring presently in the community and assumes staff will produce correct activity documentation to the FEMA/ISO reviewers. Wetlands Watch is not responsible for lower CRS Ratings earned by the community, as FEMA/ISO reviewers exercise varying methods for awarding credits. The potential policyholder premium savings reflect data acquired through the Virginia Department of Conservation and Recreation on February 11, 2019. Point estimates are calculated using the 2017 CRS Coordinator's Manual and are subject to change.

The 2020-2021 CRS Workshops, Task 92.03, were funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant FY20 #NA20NOS4190207 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Questions: Please contact Mary-Carson Stiff, mc.stiff@wetlandswatch.org, (757) 376-1364





Locality Departmental Contacts for CRS Program

Departments & Contacts for CRS Activity Implementation

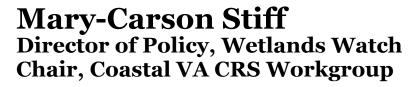
CRS Activity	Responsible Department	Department Contact Info						
300 Series: Public Information Activities								
310 – Elevation Certificates								
320 – Map Information Service								
330 – Outreach Projects								
340 – Hazard Disclosure								
350 – Flood Protection Information								
360 – Flood Protection Assistance								
370 – Flood Insurance Promotion								
400 Series: Mapping & Regulations								
410 – Floodplain Mapping								
420 – Open Space Preservation								
430 – Higher Regulatory Standards								
440 – Flood Data Maintenance								
450 – Stormwater Management								
500 Series: Flood Damage Reduction Activities								
510 – Floodplain Management Planning								
520 – Acquisition & Relocation								
530 – Flood Protection								
540 – Drainage System Maintenance								
600 Series: Warning & Response								
610 – Flood Warning & Response								
620 – Levees								
630 – Dams								

THE COMMUNITY RATING SYSTEM WORKSHOP

CRS OVERVIEW, COSTS & BENEFITS, & COMMUNITY ASSESSMENT







CRS Workshop Town of Smithfield Funded by the Virginia Coastal Zone Management Program





WORKSHOP SCHEDULE





- 1) Introductions
- 2) NFIP Quick Overview
- 3) CRS Program Overview
- 4) CRS National & Virginia Profiles
- 5) Potential CRS Savings in Saxis
- 6) CRS Resources Support, Time Saving, Etc.
- 7) Weighing the Costs & Benefits of Joining the CRS
- 8) Community Check In What Do You Think?
- 9) CRS is a Group Effort Establishing a CRS Team
- 10) Review of Community Actions & Staff Designations
- 11) Wrap Up, Next Steps, & Deliverables





WHY DOES WETLANDS WATCH CARE ABOUT CRS?

INCENTIVIZING LOCAL GOVERNMENT PLANNING FOR RESILIENCE



Highest CRS credit earning activities: Promote resilience & adaptation to increased flooding



Open Space Preservation



Acquisition & Relocation







THE NFIP: OVERVIEW









NFIP: SERVING THREE PURPOSES



1) MAP: Mapping Flood Hazard

Where will it flood during storms or high tide?

2) RISK: Managing Floodplains in High Risk Areas

To receive benefits of enrolling in NFIP, local governments must meet a number of minimum regulatory requirements (ex: reducing flooding through zoning, building codes, etc.)



3) INSURE: Providing Flooding Insurance

Flood insurance premiums at a "low-cost"



NFIP: AN OVERVIEW & EXAMPLES OF FLOOD MAPS



NFIP offers affordable coverage & available almost everywhere in US

Get NFIP policies through local agents

Flood insurance is not included in homeowners insurance

FEMA Determines flood insurance rates for the NFIP using flood maps – all land is ZONED by risk



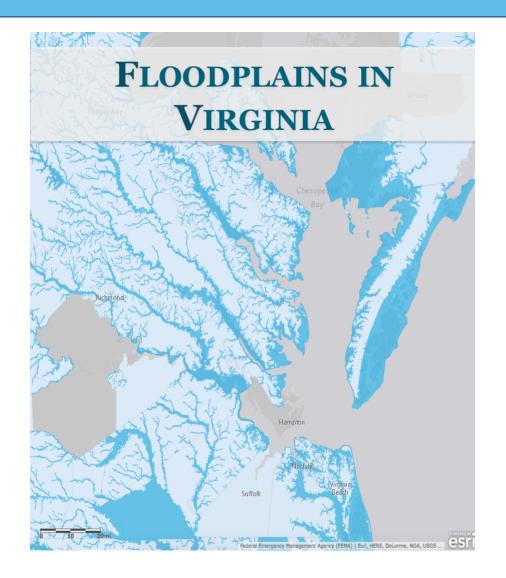
High-risk flood areas are called "Special Flood Hazard Areas" (SFHA)

The SFHA represents **how far** & **how high** flood waters will reach during the 100-year storm

FLOOD RISK IN VA









NFIP: WHY DO WE CARE ABOUT SFHAS?



- **RISK:** There is a 26% chance a property located in the SFHA will flood over the course of a 30-year mortgage
- **INSURANCE:** Properties located in the SFHA that have a mortgage from a federally regulated or insured lender → flood insurance is required.
 - Flood insurance is NOT included in traditional homeowners insurance
 - <u>NOTE</u>: Banks may require that property owners purchase flood insurance, even if the property is located outside the SFHA (premium will be lower)

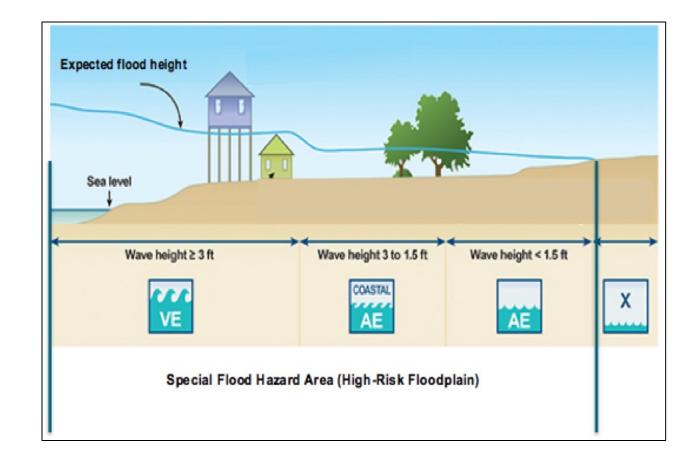




Mapping Flood Hazards: Zones of Risk









THE NFIP'S COMMUNITY RATING SYSTEM (CRS)



The Community Rating System Program → "CRS Program"





THE CRS PROGRAM



 Voluntary NFIP program offers discounts on flood insurance to reward good floodplain management within a community

 Various activities to improve floodplain management earn credit





Administered by the "community" =
 government division with land use authority
 (locality)

GOALS OF THE CRS PROGRAM



- Reduce flood damage to insurable property
- Strengthen and support the insurance aspects of the NFIP
- Encourage a comprehensive approach to floodplain management



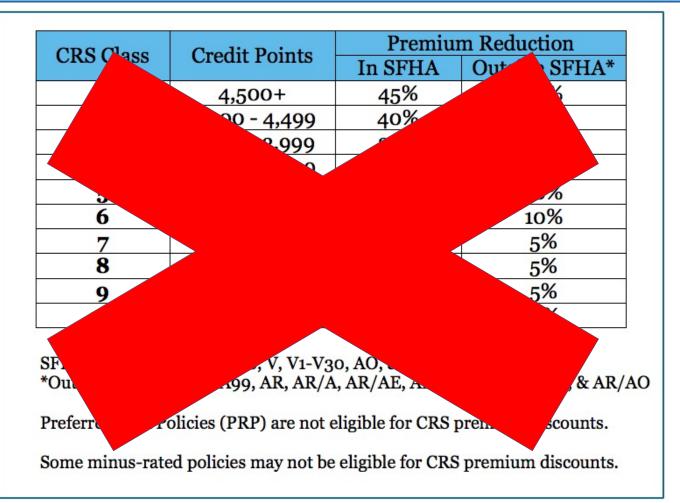




CRS RATING TABLE







AR: Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.

A99: Areas in SFHA that will be protected by a federal flood protection system (levee, dam, dike, etc.)

AR/AE, AR/AH, AR/AO, AR/A = Dual Flood Zones = risk of flooding from water sources not protected by flood protection restoration



CRS DISCOUNTS EXPANDED!



All NFIP policies now eligible for CRS discounts!



Why did this change?



NFIP UPGRADE → "RISK RATING 2.0"









"RISK RATING 2.0" -> RATING CHANGE





Equity in Action premiums will more accurately reflect a property's unique flood risk by considering a broader range of variables.

Current Rating Methodology

FEMA-sourced data

Rating Variables

- Flood Insurance Rate Map Zone
- Base Flood Elevation
- Foundation Type
- Structural Elevation (Special Flood Hazard Area Only)

1% Annual Chance of Flooding (Frequency)

Fees and Surcharges



Risk Rating 2.0 Methodology*

FEMA-sourced data

Additional data sources: Federal governmentsourced data, commercially available third-party

Cost to Rebuild

Rating Variables

- Distance to Coast/Ocean/River
- River Class
- Flood type Fluvial/Pluvial
- Ground Elevation
- First Floor Height
- Construction Type/Foundation Type

Broader Range of Flood Frequencies

Fees and Surcharges

*Additional variables are not shown here

Federal Emergency Management Agency

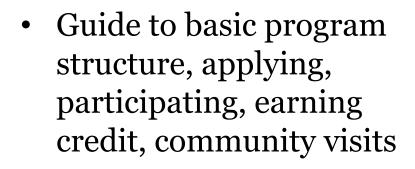


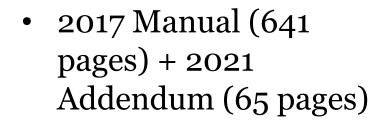


CRS PROGRAM: MANUAL + ADDENDUM











Addendum to the
2017 CRS Coordinator's Manual

National Flood Insurance Program Community Rating System

2021



Website: crsresources.org



CRS TASK FORCE



• Group of floodplain managers across all levels of government and the private sector, from across the country

Deliberates CRS issues





Meets three times each year



ISO - Insurance Services Offices



Contractor: Operates the CRS on behalf of FEMA

- 19 Community Specialists
 - What do they do?
 - Processes annual recertification report (electronic submittal every August 1st)
 - Conduct community "cycle visits" (every 5 years)
 - Grant majority of credit
 - Each specialist has about 100 communities
 - One head specialist for each state
 - VA: Emily Schmidt, emily.schmidt@verisk.com





CRS PROGRAM: POINTS EARNED FOR ACTIONS IN SFHA







Link to FEMA map



CRS PROGRAM: POINTS EARNED FOR ACTIONS IN SFHA









CRS ACTIVITY EXAMPLES - SEE MASTER LIST HANDOUT



Public Information

• Educating public on flood risk, hazard disclosure, map information (GIS), flood protection assistance

Mapping and Regulations

 Mapping flood risk, preserving open space, low density zoning, protecting shorelines, freeboard, building codes, managing stormwater

Flood Damage Reduction

• Floodplain management planning (hazard mitigation plans), acquiring or relocating high risk properties, mitigating structures, maintenance of drainage system

Warning and Response

 Plans for warning alerts and response operations for threats from flood events, and dam/levee failures





MINIMUM REQUIREMENTS FOR CRS PARTICIPATION



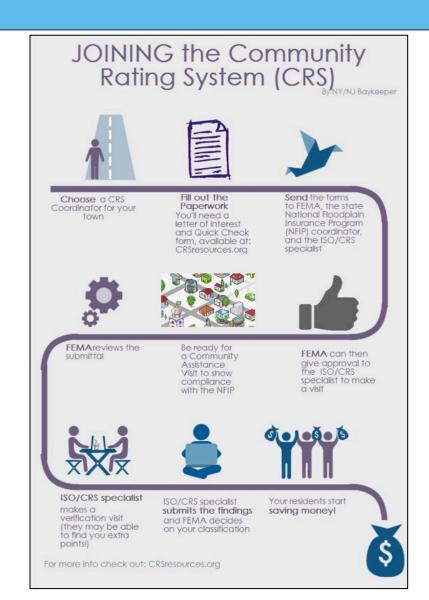
- 500 credit points, to achieve a Class 9
- Full compliance with minimum NFIP regulations
- Maintain elevation certificates (new construction & substantial improvements)
- Meet repetitive loss criteria
 - Category A no repetitive loss properties
 - Category B 1-49 repetitive loss properties
 - Identify areas via map, describe causes of flooding, list of addresses in area, & notice (letter) sent to properties in area each year
 - Category C 50 or more repetitive loss properties
 - B requirements, hazard mitigation plan including description of areas + review of flood insurance claim information **OR** repetitive loss area analysis reports for each area



PROCESS FOR JOINING THE CRS - REFER TO HANDOUT









CRS: NATIONAL PROFILE



- CRS policyholders saved over \$355 million on premiums in 2016
- CRS localities in every state Florida has the most (230 as of 2016)
- CRS popularity growing, but current 6% national participation rate
- CRS policyholders make up 70% of all NFIP policies
- 77% of CRS communities adopt 1-3 feet of freeboard
- Localities with few & many policies enroll in the CRS
- Number of Class 5 communities increased by 31% in 2 years





CRS: VIRGINIA PROFILE



CRS in Virginia

27 communities in CRS (5+ interested) 9% participation rate



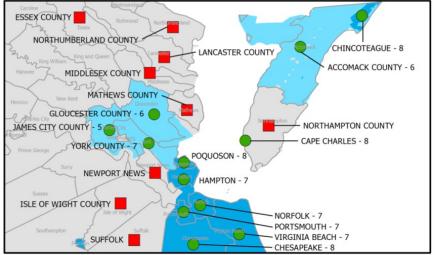
Policies in Force	Premium	CRS Savings
83,508	\$56,526,770	\$6,600,944

Data from VA DCR, 2021



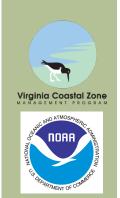
Participating in CRS Not Participating in CRS **Other NFIP Communities** FREDERICK COUNTY LOUDOUN COUNTY Participating City/Town FAIRFAX FALLS CHURCH - 6 Participating County SHENANDOAH COUNTY ARLINGTON COUNTY - 8 Not Participating ALEXANDRIA - 6 **ROCKINGHAM COUNTY** HARRISONBURG -FAIRFAX COUNTY - 6 PRINCE WILLIAM COUNTY - 7 STAFFORD COUNTY 7 FREDERICKSBURG TO COLONIAL BEACH SPOTSYLVANIA COUNTY AUGUSTA COUNTY WESTMORELAND COUNTY WAYNESBORO -ALBEMARLE COUNTY HANOVER COUNTY ALLEGHANY COUNTY HENRICO COUNTY -**BUCHANAN COUNTY** BOTETOURT COUNTY RICHMOND - 8 SALEM CHESTERFIELD COUNTY ROANOKE COUNTY - 8 ROANOKE - 7 Martigville

Top 50 NFIP Communities



CRS ACTIVITY EXAMPLES - HOW DO CREDITS WORK?





Requirement: Must be distributed every year

What Matters: Types of topics/messages? How many? What format?

Outreach Topics: (1) Know Your Flood Hazard, (2) Insure Your Property, (3) Protect People, (4) Protect Property, (5) Build Responsibility, (6) Protect Natural Floodplain Functions

Outreach Type:

Informational Outreach Projects

Booklets, brochures, flyers in libraries, City Hall Each topic is worth 1 point

General Outreach Projects

Signs, presentations, newspaper articles Each topic is worth 2 points

Targeted Outreach Projects

Projects that reach specific groups – letters to SFHA, RL, etc. Each topic is worth 6 points





CRS ACTIVITY EXAMPLES - How Do CREDITS WORK?



Activity 420, Open Space Preservation (max 2,020 points)

Requirement: Properties in SFHA where development is prohibited

Base Credit: Preserved land in the SFHA

Extra Credit(s):

- Deed restrictions
- Natural functions open space (preserved to natural state)
- Special flood related hazards open space
- Coastal erosion open space

Other Related Credit(s)

- Open space incentives (subdivision reqs, cluster, PUD, TDR)
- Low density zoning (lot sizes of 5 acres or larger)
- Natural shoreline protection (local govt programs that protect shorelines & channels - RPAs would not qualify b/c OSP)





CRS ACTIVITY EXAMPLES - How Do CREDITS WORK?



Acquiring Properties & Removing from Floodplain Activity 520, Acquisition & Relocation (max 2,250 points)

<u>Requirement</u>: Properties in SFHA where structures were demolished & parcels are undeveloped open space

Base Credit: Building acquired in OR relocated from the floodplain

Extra Credit(s):

Buildings on repetitive loss lists (credit multiplier)

Double Credits

- Repetitive Loss: 2 or more claim payments more than \$1,000 each within 10 year period (since 1978)
- Critical Facilities

Triple Credits

 4 or more claim payments more than \$5,000 each, with cumulative claims exceeding \$20,000 OR two separate claim payments with cumulative amount exceeding FMV of building

Single Credits: Buildings located in V or Coastal A Zone (1/2 double credit)



What Savings Are Possible In This Community? -Refer to the "What If" Handout-





10/12/21,	5:57 PM CIS: CRS Printable What If						
	Community:	SMITHFIELD, TOWN OF	State:		VIRGINIA		
	County:	ISLE OF WIGHT COUN1 ✔		CID:	510081		
		Cu	[Pr	[Printable Version			
			TOTAL	SFHA*	X-STD/AR/A99	PRP ***	
		PIF	81	10	2	69	
		PREMIUM	\$52,584	\$20,935	\$1,163	\$30,486	
		AVERAGE PREMIUM	\$649	\$2,094	\$582	\$442	
	CRS Class						
	09	Per Policy	\$14	\$105	\$29	\$0	
		Per Community	\$1,105	\$1,047	\$58	\$0	
	08	Per Policy	\$27	\$209	\$29	\$0	
		Per Community	\$2,152	\$2,094	\$58	\$0	
	07	Per Policy	\$39	\$314	\$29	\$0	
		Per Community	\$3,198	\$3,140	\$58	\$0	
	06	Per Policy	\$53	\$419	\$58	\$0	
		Per Community	\$4,303	\$4,187	\$116	\$0	
	05	Per Policy	\$66	\$523	\$58	\$0	
		Per Community	\$5,350	\$5,234	\$116	\$0	
	04	Per Policy	\$79	\$628	\$58	\$0	
		Per Community	\$6,397	\$6,280	\$116	\$0	
	03	Per Policy	\$92	\$733	\$58	\$0	
		Per Community	\$7,444	\$7,327	\$116	\$0	
	02	Per Policy	\$105	\$837	\$58	\$0	
		Per Community	\$8,490	\$8,374	\$116	\$0	
	01	Per Policy	\$118	\$942	\$58	\$0	
		Per Community	\$9,537	\$9,421	\$116	\$0	



CRS RESOURCES - SUPPORT, TIME SAVING DOCS, ETC.



Web Training: crsresources.org

• (Online materials, documentation templates, etc.)

In Person Training: FEMA's <u>Emergency Management</u> <u>Institute</u> (near Gettysburg) & local NFIP/CRS courses

Learn From Peers: Coastal VA CRS Workgroup

Independent Study: Self-Guided CRS Manual Review

Important Contacts

- FEMA Region III CRS Coordinator: Rich Sobota, <u>Richard.Sobota@fema.dhs.gov</u>
- VA ISO Specialist: Emily Schmidt emily.schmidt@verisk.com





COASTAL VIRGINIA CRS WORKGROUP



COASTAL VIRGINIA COMMUNITY RATING SYSTEM WORKGROUP





W E T L A N D S W A T C H

Website

www.coastalvacrs.com

What are we?

A community of practice, supporting strong floodplain management & success in the CRS Program

Who are our members?

Staff from local governments, planning district commissions, state agencies, federal agencies, academic institutions, & businesses

Where are they from?

As far west as Roanoke, east as Accomack County, & north as the City of Alexandria

How often/where do we meet?

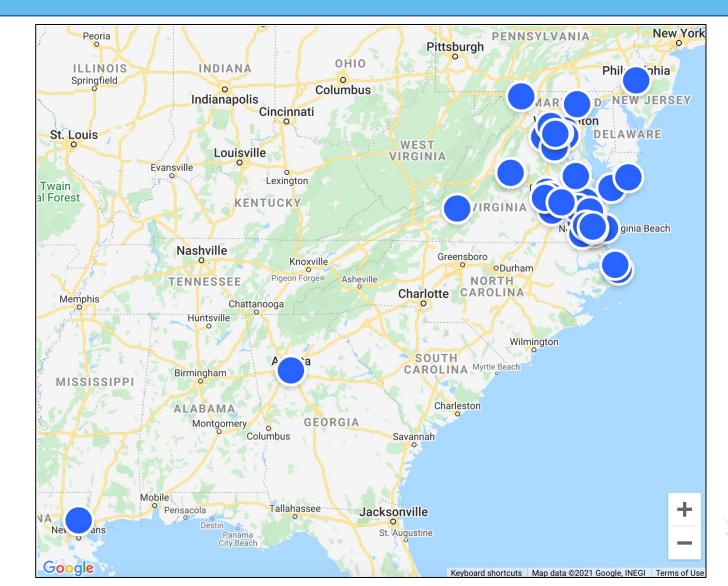
Every other month in the City of Newport News' Town Center with online Zoom option



COASTAL VIRGINIA CRS WORKGROUP









WORKGROUP WEBSITE: INFO AVAILABLE



NFIP/CRS Statistics

Past Meeting Materials

Meeting notes & speaker PowerPoint Presentations

Important CRS Information

Organized by CRS Activity: time saving documentation

Workgroup Work Products

Template letters & forms created by CRS members & used for easy plug-and-play documentation

CRS Successes & Lessons Learned

Insight from local government staff presentations to Workgroup members following ISO cycle visits





CRS DATA COLLECTION IN VIRGINIA



WWW.WETLANDSWATCH.ORG

December 2020

VIRGINIA CRS COMMUNITIES

CRS ACTIVITY SCORES





Data collection for www.adaptva.org

Cite: "Virginia CRS Communities Activity Scores," Stiff, M.C., Wetlands Watch, 2020.

VA Community Rating System (CRS) Coordinators provided CRS activity scores to Wetlands Watch Director of Policy and Chair of the Coastal Virginia CRS Workgroup. Contact Mary-Carson Stiff, mc.stiff@wetlandswatch.org, for more information.



CRS DATA COLLECTION IN VIRGINIA, EXAMPLE







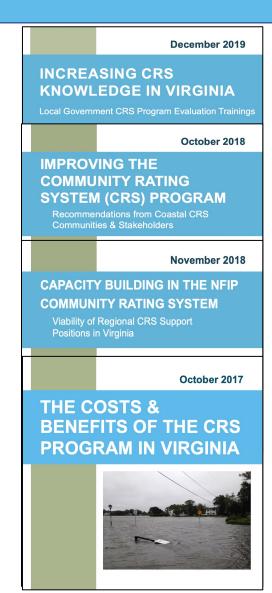
ACCOMACK COUNTY												
Class 6: Effective May 1, 2	Class 6: Effective May 1, 2018 (2013 Manual)											
CRS Action	Corresponding CRS Activity Number	Credit Points Received	Total Possible Credit Available for Action	Possible Credits Received (Percentage)								
Elevation Certificates - Keeping ECs for new & substantially improved	Number	Received	IOI ACCIOII	(Fercentage)								
buildings, copies of ECs available upon request	310	30	116	26%								
Map Information Service - Providing information through FIRMs,	310	30	110	20/0								
including additional information such as special flood related hazards & natural floodplain functions. Service publicized annually & records maintained	320	90	90	100%								
Outreach Projects - Credit for VA Hurricane Guide, flood												
insurance/protection brochures, civic presentations, annual safety	11.71											
week booth, & letter to repetitive loss areas	330	146	350	42%								
Hazard Disclosure - Final recorded subdivision plats are required to show SFHA	340	5	80	6%								
Flood Protection Information - Information provided in public library & on the community's website	350	86	125	69%								
Open Space Preservation - 73% of SFHA	420	1,232	2,020	61%								
Higher Regulatory Standards - Freeboard, local drainage protection, building codes, BCEGS 4/4, state mandated standards, & regulations administration	430	140	2,042	7%								
Flood Data Maintenance - Using digital maps	440	140	2,042	60%								
Floodplain Management Planning - Eastern Shore of Virginia Hazard	440	144	239	00%								
Mitigation Plan (2016)	510	181	622	29%								
CGA - County Growth Rate = 1.0	510	101	322	2570								
Total Credits		2054										

ACCOMACK COLINTY

WETLANDS WATCH CRS RESEARCH & ANALYSIS









WHAT'S THE TIME COMMITMENT?



Question for Community:

- Who would serve as the CRS Coordinator?
 - What are the current responsibilities?
 - Time for additional activities?









October 2017

THE COSTS & BENEFITS OF THE CRS PROGRAM IN VIRGINIA





Author: Mary-Carson Stiff, CFM Director of Policy, Wetlands Watch Chair, Coastal VA CRS Workgroup







CRS Costs & Benefits Data: The existing research is benefit saturated.

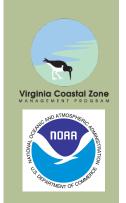
We need data on the COSTS of joining & maintaining participation.

CRS Localities Experience Less Flood Damage

- CRS communities experienced ~38% less insured flood damage inside the Special Flood Hazard Area (high risk flood zones) compared to non-CRS communities
- CRS communities experienced ~36% less insured flood damage outside the Special Flood Hazard Area compared to non-CRS communities



l losses in the United States.



CRS Activity Points → Flood Loss Savings



1 CRS Point for Freeboard (430) = \$8,289 flood loss savings/year



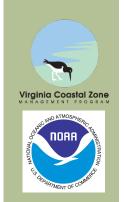
1 CRS Point for Open Space (420) = \$3,532 flood loss savings/year



1 CRS Point for Flood Protection (530) = \$4,175 flood loss savings/year



Source: Highfield, W.E., & Brody, S.D. (2013). Evaluating the Effectiveness of Local Mitigation Activities in Reducing Flood Losses. *Natural Hazards Review*, 14, 229-236.



CRS Savings Reinvested in Locality

Virginia Beach Case Study

Hypothetical Class 8 Rating = \$853,813 flood insurance premium savings

Direct Spending: City determined that of the \$853,813 saved by policyholders, \$362,666 (42%) would be spent directly in City



<u>Indirect Spending</u>: City determined that of the \$362,666 directly spent, \$145,831 (40%) would be spent in City by business recipients of direct spending





Wetlands Watch Analysis







Costs of Participating in the CRS Program

Direct Costs

- Staff time (largest cost)
- Outreach materials (if required based on # of repetitive loss)
- GIS/online mapping support
- Costs of pursuing credit for actions not currently underway



Indirect Costs

- FEMA L-278 CRS Course
- CFM Certification/ASFPM membership
- Other continuing education costs





Asked VA CRS Coordinators how much time they spend on CRS each year 21/25 Coordinators provided estimated responses (84% response)

The median estimated percentage of time CRS Coordinators in





Reported percentages ranged from 1% FTE to 100% FTE

Does not include support staff (average 4.5, ranging 1-8 support staff)
Does not include duties shopped out of small localities (town to county)



"There is never enough time."

<u>CRS Coordinator's other responsibilities influence the amount of time</u>: "CRS is always in the back of my mind because everything I do on the building inspection side is always CRS & floodplain management."



Estimated VA CRS Coordinator Salary





- Does not include staff benefits/fringe
- Data via VA Labor Market Information: Average of yearly median wages for 5 different occupation categories, including Emergency Management Directors, engineers of varying levels, & planners.
- Reflects high/low cost of living in various regions of the state
- Captures salary differences of senior/junior career positions







When applied to lower salaries:



13% x \$40,000 = \$5,200

13% x \$50,000 = \$6,500

13% x \$60,000 = \$7,800

13% x \$70,000 = \$9,100

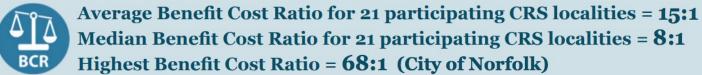
 $13\% \times \$80,000 = \$10,400$



VA CRS Benefit Cost Ratio







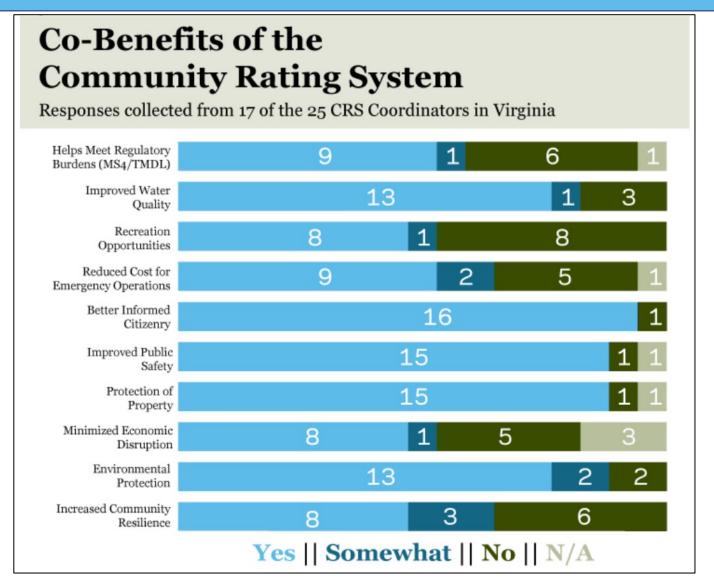


- Average BCR uses the 13% median Coordinator staff time: does not favor localities investing less staff time for a proportionally smaller benefit
- Small localities reporting 1% FTE with a small premium discount get a positive benefit cost ratio, but their ratio turns negative when using the 13% time estimate
- Asked localities for permission to use benefit cost ratio with actual estimated percentage of time. 17 of 21 localities said yes. 4 localities use the 13% median time

Virginia CRS Benefit Cost Ratios										
CRS Locality	CRS	Locality Wide	Total Eligible Policies	Benefit Cost Ratio						
	Rating	Savings		(Average Year)						
Accomack County	8	\$142,454	1,524	18:1						
Alexandria, City of	6	\$224,740	998	7:1						
Arlington County	8	\$16,916	482	4:1						
Ashland, Town of	9	\$1,197	27	1:1						
Bridgewater, Town of	8	\$7,126	45	1:1*						
Cape Charles, Town of	9	\$1,063	34	0.1:1*						
Chesapeake, City of	8	\$431,296	5,113	19:1						
Chincoteague, Town of	8	\$140,530	1,202	12:1*						
Fairfax County	6	\$432,822	3,200	37:1*						
Falls Church, City of	6	\$36,341	176	1:1						
Gloucester County	6	\$287,084	1,200	25:1						
Hampton, City of	8	\$867,643	8,456	49:1						
James City County	7	\$65,910	420	9:1						
Norfolk, City of	8	\$789,211	8,314	68:1						
Poquoson, City of	8	\$304,420	2,925	9:1						
Portsmouth, City of	7	\$355,453	2,862	31:1						
Prince William County	8	\$53,077	340	5:1*						
Richmond, City of	8	\$40,198	274	6:1						
Roanoke County	8	\$43,226	290	2:1						
Roanoke, City of	7	\$196,898	516	22:1						
Stafford County	7	\$39,187	179	3:1*						
Vienna, Town of	8	\$4,316	35	0.4:1*						
Vinton, Town of	8	\$7,305	34	1:1*						
Wachapreague, Town of	8	\$5,010	49	6:1						
York County	7	\$260,861	1,652	20:1						
	an Percent		ed to Calculate Benefit Cos	st Ratio						
Town of Vinton joined within the past year, so did not provide an annual percentage										











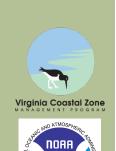
Additional Secondary Benefits of the CRS Program

- Helps strengthen organization, coordination, and encourages the break-down of silos across locality departments
- Helps minimize harmful impacts to the community
- Helps promote shoreline protection
- Participation in the CRS provides positive economic value
- Helps build political support for CRS earning activities
- May help earn more grant funding
- Helps save localities money
- The CRS savings have a snowballing effect





CRS BENEFIT CASE STUDIES



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CRS Benefit Case Studies

CRS Benefit Case Studies

December 2019

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CRS Class Rating: 7 15% Premium Discount

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The CRS Program's Benefit

The National Flood Insurance is flood insurance premium red invariably decide to join the CR the CRS vields countless second difficult to quantify, as discusse community regards the Program



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The Strategy: Educate Busi

Portsmouth's CRS Coordinator regulations in the City's downto Planning Commission, Meg inc erecting door dams, can help pr



The Result: Business Locat

The Result: Profe

- "Almost 40 percent of small a few inches of water can car







This case study, Task 92.04, was funded by the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant FY18 #NA18NOS4190152 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

The CRS Program

The National Flood is flood insurance pr invariably decide to the CRS yields coun difficult to quantify, community regards



The Strategy: Price

To date, the Town or been integrated into allowing the creative fall outside existing passive use parks, B golf course and exer the Town's newslett opportunitites for th helped build public

The Result: Comr

- · In Bridgewater, acquisition. This discounts earned policy holders. T
- "The Town's par we take actions l



· Poquoson's risk Businesses located in the his one [Hurricane]

they elect to mitigate the prousing flood resistent materia businesses from loss of retai



The CRS Helps Obtain Grant Assistance Accomack County, Virginia

CRS Class Rating: 6 20% Premium Discount **CRS Coordinator: Tom Brockenbrough** tbrockenbrough@co.accomack.va.us

The CRS Program's Benefits Extend Beyond Flood Insurance Premium Discounts

The National Flood Insurance Program's Community Rating System (CRS) most recognizable benefit is flood insurance premium reductions for property owners located in high risk flood zones. Localities invariably decide to join the CRS Program for the flood insurance discounts, although participation in the CRS yields countless secondary benefits. While the secondary benefits of CRS participation prove difficult to quantify, as discussed in previous research, the following case study explores how one CRS community regards the Program as a community asset, beyond premium discounts,



Accomack County CRS Coordinator, Tom Brockenbrough, reported that the CRS Program helped the County receive a favorable federal cost share of FEMA grant funding after Hurricane Floyd (1999). FEMA grant funds to the County covered 95% of the \$1.3 million received, requiring only a 5% local share for the project costs. The County's favorable cost share ratio was credited to its participation and success in the CRS Program.



The Strategy: Join the CRS Program and Increase the Community's Class Rating

If a community does not participate in the CRS Program, it would not be eligible to benefit from the Program's favorable status in certain FEMA grant programs. Currently, participation and rating in the CRS Program is a weighted factor in two FEMA grant programs, the Pre-Disaster Mitigation Grant Program (PDM) and the Flood Mitigation Assistance Grant Program (FMA).

The Result: The CRS Program Helps Communities Access FEMA Grant Assistance

FEMA grant assistance is often the only flood mitigation funding utilized at the local level, but the local cost share can be prohibitive in many communities. Additionally, qualifying for the assistance can present a challenge. The CRS Program can help local governments overcome these barriers and obtain assistance











Barriers to Earning Benefits in the CRS: VA Locality Perspectives

- Limited staff time
- CRS too complex & documentation is intensive
- CRS only discounts policyholders in floodplain (big barrier, but changing!)
- Costs of earning some credits outweighs the points awarded
- General CRS information is overwhelming and complicated
- Enrolling in the CRS could expose the locality to liability



Each section includes suggestions for overcoming the barrier



WHAT DO YOU THINK?



Do you want to join?

Staff time for joining the CRS: One CRS Coordinator estimated spending 80-120 hours on the application process

Staff time for annual recertification: One Coordinator estimated spending a "solid week of work"

<u>Staff time for 5-year Cycle Visits</u>: Two communities seeking to improve their class rating reported the following:

- 4-6 weeks of CRS Coordinator working full time
- 3 weeks of CRS Coordinator working full time + 1 week of permit tech full time + 3 days of GIS staff full time



Long waiting list of interested communities in Virginia
Outstanding CAVs can delay enrollment in the Program



STAFF BURDEN - REFER TO DEPARTMENTAL CHART HANDOUT



Establishing a Community "CRS Team"

Willingness to share the burden of the CRS Program?





CRS CREDITABLE ACTIVITIES CURRENTLY UNDERWAY



What are you already doing that could earn CRS credit?

Mary-Carson will ask questions and your responses will populate the "CRS Quick Check," which is required documentation for a CRS Application.





WORKSHOP: WRAP UP, NEXT STEPS, & DELIVERABLES



• What happens next?

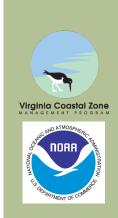
- Follow up with responsible staff
- Review locality responses
- Clean up CRS Quick Check
- Estimates for potential CRS class

Deliverables

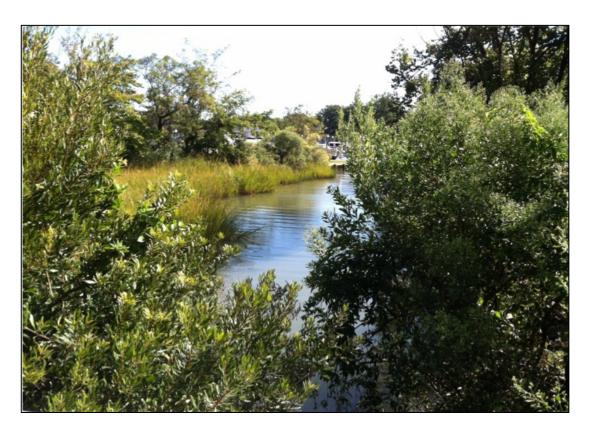
- PowerPoint Presentation
- Completed CRS Team Handout
- Completed CRS Quick Check
 - This doc should be submitted by the community in event of submitting an application to join the CRS
- Completed Advanced CRS Quick Check
 - This doc can be used by community to prepare for first ISO visit
- Workshop Summary Report
 - One page PDF document outlining ESTIMATED potential CRS score & corresponding flood insurance premium savings
 - Could be used to market CRS in presentation to community Board



QUESTIONS?







Mary-Carson Stiff, CFM, JD mc.stiff@wetlandswatch.org



					CRS Quick Check									
			Comn	nunity Name Smithfield	State State	lva		BCEGS						
			N	FIP Number 510081A	FIRM Effective Date		12/2/15	BCLGG						
\vdash				Population cation Date	Current FIRM Date		12/2/15 Isle of Wight	-						
			Арр	<u>.</u>	County	CRS Coordinator	iale of Wight							
\vdash				Chief Executive Officer Name		ONO COORDINATOR								
				Title Address										
—				Address										
				CRS Coordinator's phone CRS Coordinator's e-mail		Fax								
		1	I	•			Can Meet	Ente		Notes			ı	
211	tion	a(2)		Prerequisites Have you had a recent Community Assistance Visit (CAV) that concluded you are it	n full compliance with the NFIP?	Met No, but when the Town is ready to	Can Meet	Ente	ter	Notes				
						join, the CRS Coordinator should ask the Clerk, Leslie King								
		a(4)		How many repetitive loss properties are there in your community?		Not sure, but likely a category B								
		a(4)		What is your repetitive loss category? (A = no rep losses, B = 1 - 49, C = 50 or mo Category B: Get a general sense of where the repetitive loss properties are. See if	re)	Likely B								
				Repetitive loss Areas" at http://crsresources.org/500-2/. Your community will have	to provide:									
	 a. A description of the causes of the repetitive loss flooding. This may be a brief paragraph for each area. b. A map identifying the repetitive loss areas. Those areas include the properties on the FEMA list and adjacent properties with similar 													
	flooding conditions. c. A list of the addresses of all properties in the repetitive loss area(s) with insurable buildings on them.													
				 A notice must be sent to each property in the repetitive loss areas every year. Ye 	our ISO/CRS Specialist can explain the details.									
		a(5)		Have you maintained flood insurance policies on all buildings that have been require	ed to have one? (If federal aid received to repair building)	N/A			_					
213		а		How many buildings are in your community's Special Flood Hazard Area?		Unknown					<u> </u>			<u> </u>
		а		How large is your community's Special Flood Hazard Area (in acres)?		1,757.6 acres	Breakdown from IOW GIS staff, Mike O'Shell in December 2021 Zone A:			This calculation does not exclude federal lands, open water, or large bodies of water. When the				
							.2 acres : Zone AE: 1375.1 acres :			community officially joins the CRS Program the				
							Zone VE: 382.3 acres			area of the SFHA should exclude federal lands,				
1										open water, and large bodies of water (10 acres of more).		1		
1												1		
		1	1							Lucaro	Decimentation :			TEMPI ATE(0)
310	а	EC	Maintaining	CRS Activities and Elemen Will you keep FEMA Elevation Certificates on all new buildings and substantial impro	ts overnents in the SFHA? (many receive 30 ish points)	Currently Underway Maintaing elevation certificates is an		Credit 30	Max 38	NOTES Required for all CRS Communities	DOCUMENTATION INFO* Copies of elevation	Low	DOCUMENTATION	TEMPLATE(S)
			Elevation Certificates			IOW County responsibility.	but would agree to it as a condition of joning the CRS Program.				certificates			
			Certificates				joining the CNS Frogram.							
	ь	ECPO	Maintaining	Do you have FEMA Elevation Certificates on buildings built before your CRS applica	ation?	Uknown - this is an IOW County		0	48		Copies of elevation	Moderate		
			Elevation Certificates for post-	,,,		responsibility					certificates			
	С	ECPR	Maintaining	Do you have FEMA Elevation Certificates on buildings built before the date of the co	ommunity's first FIRM?	Uknown - this is an IOW County		0	30		Copies of elevation	High		
			Elevation Certificates for pre-		•	responsibility					certificates	,		
			FIRM buildings											
320	а	MI1		Are you willing to publicize that you will read FIRMs for inquirers and keep a record	of what you told them?	Currently the GIS system for the Town is down. The town advises	Possibly, but not having the information on their Town's site	0	30	Must get MI1 credit before any additional elements in 320. To receive this credit, the	Copy of the notice	High	A sample letter the community could send to	A sample tracking document the
						people to use the IOW county viewer.	hinders committment to this credit. If			community must send an annual letter/written			lenders/agents that was	community could
							the Town wanted this credit, they could publicize the service in the			notice explaining the FIRM-reading service offered by the community to either everyone in			drafted by the Coastal VA CRS Workgroup	use to record calls that was drafted
			Basic FIRM				Town mailer that goes out to everyone via both paper mail and			the community or to the most common users of the service: lenders (banks), insurance agents,			members can be downloaded HERE.	by the Coastal VA CRS Workgroup
			information				email.			and real estate agents - this can be a mailing or			downloaded FIERE.	can be
										an article in professional association newsletters (local chapter of real estate group or chamber of				downloaded_ HERE.
										commerce). The maximum credit for 320 is 90				HEKE.
										points.				
1	ь	MI2	Additional FIRM information	Do you provide inquirers with other non-insurance related information that is shown	on your FIRM? (floodways, coastal A zone, etc.)	N/A		0	20	If the Town decides to pursue this credit in the future, note that staff are providing MI2	Screen shot of the non- insurance info on FIRM	Low		1
	С	MI3	Problems not shown	Do you provide information about flood problems other than those shown on the FIF	RM? (drainage issues, sea level rise, dam inundation)	N/A		0	20		Screen shot of problem(s)	Low		
-	d	MI4	on the FIRM Flood depth data	Do you provide information about flood depth (this information is available through the	ne VA VRIS mapping tool?	N/A		0	20		location available on a map Screen shot of flood depth	Moderate		-
	e	MI5	Special flood-related	Do you provide information about special flood-related hazards, such as erosion, si	ubsidence, or tsunamis?	N/A		0	20		Screen shot of a special	Moderate		
	f	MI6	hazards Historical flood	Do you provide information about past flooding at or near the site in question? (histo	pric flood levels, in repetitive loss area, photographs)	N/A		0	20	If the Town decides to pursue this credit in the	hazard(s) location available Dates of past flooding &	Moderate		
<u></u>			information					ŭ		future, note that staff are providing MI6	general location			
	g	MI7	Natural floodplain	Do you provide information about areas that should be protected because of their n habitat, etc.)	atural noodplain functions? (wetlands inventory, critical	N/A		0	20	If the Town decides to pursue this credit in the future, note that staff are providing MI7	Screen shot of info on FIRM	Low		
1			functions							information to callers.		1		
330	а	OP		Does the community provide flood related informational brochures, flyers, or other	documents in public places for members of the	Related flyers go out at various		20	200	You can only receive credit for the same		Moderate	A spreadsheet to track	Hampton Roads
				community to pick up? Enter 2 points for each flood-related informational brochure, of points) (VA Hurricane Guide receives credit)	flyer, or other document. (This is a very rough estimate	events; they are made available in public places: Town has access to the				brochure, flyer, presentation, newsletter, etc. being used a maximum of 5 times. Extra credits	topics highlighted or marked.	1	outreach projects is available HERE.	Planning District Commission "Get
				or points) (Virtualisatio Galaci receives creatly		Hampton Roads Planning District				for PPI available			draidbo FIERE.	Flood Fluent*
						Commission's "Get Flood Fluent"								<u>campaign</u>
						resources								
1												1		
			Outreach projects											
			Guareach projects											
		0.0				N.C. WELLOW	***			V	0 (4) (4)			
	а	OP		Does the community provide flood related letter, presentations to citizen groups, ne year? Enter 2 points for each flood-related informational brochure, flyer, or other do	wsietters, or other outreach projects conducted every cument. Enter 4 points for each project. (This is a very	brochures, only rain down the drain	The municipal mailer is a perfect way to max out points in this activity.	80		You can only receive credit for the same brochure, flyer, presentation, newsletter, etc.	Copy of the material(s) with topics highlighted or marked.	Moderate	A spreadsheet to track outreach projects is	
1				rough estimate of points)		sidewalk decals, the Town has a municipal mailer goes to every single	Make sure the mailer includes all 6 topic messages and see the points			being used a maximum of 5 times. Extra credits for PPI available	Presentations may be documented with a screen	1	available HERE.	
						person in the town via both paper mail	topic messages and see the points stack up.			ioi rri avdildild	shot of the first slide and a			
						and email. This mailer already includes flood message, but could be					list of topics included.			
1						modified to maximize points.								
1		1	1			1					1	1	1	1

				CRS Quick Check									
			Comr	nunity Name Smithfield State	VA		BCEGS						
	Ф	FRP	Flood response preparations	Does the community have a pre and post flood plan for distributing outreach materials? If yes, enter 2 points for each outreach project that's part of the flood roll out.	No	An ancedotal issue that could be submitted for potential 'alternative CRS credit points' - the Town rented storage facilities for Great Springs Road (up by 171) for property owners in advance of a flood that would have predictably flooded homes.	0	50	The Town may be able to receive credit in this activity - the information will likely be included in the Media Relations portion of the Emergency Operations Plan. Extra credits for PPI available	Copy of the material(s) with topics highlighted or marked.	Moderate	A spreadsheet to track outreach projects is available HERE.	
340	а	DFH	Disclosure of the flood bazard	Do real estate agents actively advise house hunters if a property is located in a Special Flood Hazard Area? (Enter 10 points, because may not count for credit)	No		0	35	Extra 10 points for PPI	Copy of disclosure notice. Text from CRS Manual pa.	High		
	b	ODR	Other disclosure requirements	relay violuculus and undex). Requirements that selfers must disclose whether a property is at flood risk? (Requiring subdivision plets to show 2HFA lines) (5 points per requirement)	Yes - 2 state laws		10	25	Virginia passed two recent laws that are eligible under this activity, (1) va Code § 55.1-703. Requires the Real State Board to include a "Flood Risk Information Form" on their website. (2) Va Code § 55.1-702. Peaquires selent disclosure if the property is a repetitive loss structure, if they have actual knowledge of the repetitive loss status.	Copy of the relevant regulation/ordinance.	High		
	С	REB	Real estate agents' brochure	Do real estate agents give house hunters a brochure or handout advising them to check out the flood hazard before they buy?	No		0	12	Extra 4 points for PPI	Copy of the handout or broch		A sample brochure real estate agents could' distribute to potential buyers in the high hazard flood zones is available HERE.	A county in Florida created a gold standard real estate brochure that could be modified using Virginia or regionally specific information.
	d	DOH	Disclosure of other hazards	Do real estate agents disclose information about other flood related hazards? (coastal flood risks, erosion, subsidence, dam failure, sea level rise)	No		0	8		Documentation submitted for DFH that shows the other	Moderate-High		
350	a	LIB	Flood protection library	Do you have any FEMA flood-related references in your public library? (full 10 points for all 9 FEMA publications)	No. the Library is located in the County & run by the County	The Town will consider sending the last of the 9 FEMA publications to the IOW library. This is avery easy 10 points to earn.	10	10	The list of FEMA references that must be included: 1. Above the Flood: Elevating Your Flood prone House, FEMA-947 (2000) 2. Answers to Questions About the National Flood Insurance Program, Full (2011) 3. Coastal Construction Manual, FEMA-95, (2011) 3. Coastal Construction Manual, FEMA-95, (2016) 4. The control Residential Structures, FEMA-94, (1916) 4. Protecting Haundicutured Homes from Floods and Other Hazards, FEMA-98, (2000) 6. Régistion of Flood and Erossin Damage to Residential Buildings in Coastal Areas, FEMA-257, (1994) 7. Protecting Buildings in The Coastal Areas, FEMA-258, (2016) 8. Protecting Duilding Utilities From Flood Damage, FEMA-93 (1999) 8. Protecting Floodplain Resources, FEMA-268 9. Reducing Damage from Localized Flooding, FEMA 511 (2005)	Screen shot of library catalogue that shows the inclusion of FEMA brochures	Low	The document requesting the FEMA references can be accessed HERE. Fill out the document with the FEMA reference numbers (bound no eller hand) and the common services are serviced in the services and the services are services as the services are services and the services are services as the services are services are services as the services are services as the services are services as t	
	b	LPD	Locally pertinent documents	Does the library include additional references about flood ris ks related to the community or state? (Hurricane guide)	No, the library is located in the County & run by the County	The Town could request the IOW library include an online copy of the VA Hurricane Guide and/or the Hampton Roads Planning District Commission's "Get Flood Fluent" materials, which would be an easy, low effort way to earn a few points.	5	10		Screen shot of library catalogue or a picture of the locally relevant materials included in the library	Low	Virginia Hurricane Evacuation Guide	Hampton Roads Planning District Commission "Get Flood Fluent" campaign
	С	WEB	Flood protection website	Do you have flood-related information or links on your community's website?	No	. Will consider	0	105	Extra 28 points for PPI	Statement confirming the website is checked/current	Moderate	The community should reference the following document, created by the Coastal VA CRS Workgroup, a the website becomes updated. This document will explain what information must be included to receive credit under Activity 350 WEB.	
360	a	PPA	Property protection advice	Do you speak to people one-on-one offering advice about property protection? (retrofitting, drainage improvements) You have to publicize this service to the whole community or areas with flooding/drainage issues.	N/A - IOW County is responsible for structural retrofts & conversations like these with property owners		0	40	To receive this credit, or any credit included below in Activity 380, the community must send a annual letterwitten notice explaining the property protection advice service offered by the property protection advice service offered by the community to the entire community or to the most impacted group of users (such as properties beaded in the floodpain). The notice could be either of the following; (a) An annual notice that reaches everyone in the community, such as an article in a newslatter or stiffer in a utility bill that considered and the control of the activity of the control o	Copy of a memo or other record of conversation visit. The flood by used for documentation in CRS Archity 320 can be modified to fit the needs of this credit activity.	Moderate-High		
	b	PPV	Protection advice provided after a site visit	Do you make site visits before offering advice about property protection? (retrofitting, drainage)	N/A - IOW County is responsible for structural retrofits & conversations like these with property owners		0	45	If the Town decides to pursue this credit in the future, note that staff are making site visits (PPV). Extra 15 points for PPI	Copy of a memo or other record of conversation/visit. The flood log used for documentation in CRS	Moderate		
	С	FAA	Financial assistance advice	Do you talk to people about sources of financial assistance for flood or drainage protection measures?	N/A - IOW County is responsible for structural retrofits & conversations like these with property owners		0	15	If the Town decides to pursue this credit in the future, note that staff are providing information about financial assistance (FAA). Extra 5 points for PPI	Copy of a memo or other record of conversation/visit. The flood log used for documentation in CRS Activity 320 can be modified to fit the needs of this credit activity.	Moderate		
	d	TNG	Advisor training	Has the staff person providing the advice attending any FEMA courses on retrofitting or grant programs?	N/A - IOW County is responsible for structural retrofits & conversations like these with property owners		0	10	If the Town decides to pursue this credit in the future, note that staff offering property protection advice have received FEMA training (TNG). FEMA courses available for credit: E0276, L0276, E0279, L0279, E0212, L0212, IS-279, IS- 212, IS-30	A copy of the certificate(s) of course attendance	Low		

				CRS Quick Check								
			Com	munity Name Smithfield State	VA	BCEGS						
370	а	FIA	Flood insurance coverage assessment	Have you reviewed all your community's flood insurance policies and analyzed where coverage should be improved?	No	0	15		Copy of the assessment document & proof it was submitted to governing body	High	If the community is interested in conducting a flood insurance assessment, this	
	b,c	CP, CPI	coverage improvement plan, Coverage improvement plan	Oses the community have a plan for promoting flood insurance that's prepared by a committee made up of local insurance agents? Is this plan implemented?	No	0	75	15 points for preparing plan + 60 for plan implementation	Copy of coverage improvement plan & proof it was submitted to governing body	High		
	d	TA	Technical assistance	Is there someone that the community uses as an expert on flood insurance that they direct people in the community to call? Must be advertised in outreach project to at risk people	No	0	20		If the expert is not on locality staff, a letter stating the designated expert has agreed to do the work, copy of how service is publicized,	High		
410	а	NS	New Study	Has the community ever conducted your own (or paid a contractor) flood study that generated base flood elevations?	No	0	350		Copy of study, ordinance, permit records, map showing area impacted by new study, evidence study submitted to FEMA, documentation showing how SFHA was calculated.	High		
	b	LEV	Leverage	Did your community contribute to the cost of a Flood Insurance Study (e.g., provided cash or a base map with better topography)?	No	0		Multiplier for 410a	Copy of FIS pages	High		
	С	SR	State review	Was the study reviewed by a state or regional agency for quality assurance?	No	0	60		Documentation that agency reviewed results of study & data approved	Low		
	d	HSS	Higher study standards	Did the study use standards higher than those required by FEMA at the time the study was completed? (future condition, freeboard, etc.)	No	0	200		Copy of text from FIS describing HSS if used by FEMA, or ordinance adopting HSS and map showing HSS study area	High		
	е	FWS	More restrictive floodway standard	Did the study use a more strict floodway surcharge rate?	No	0	140		Copy of floodway data table & text from FIS	High		
	f	MAPSH	Floodplain mapping of special flood- related hazards	Does the community map coastal erosion hazard areas and regulate development based on the maps?	No	0	100		Map showing areas subject to hazards, description of method used for mapping, documentation for CER credit, & more if needed	Moderate		
420	а	OSP		What percentage of your Special Flood Hazard Area is kept as park or other publicly preserved open space? (public parks, school athletic fields, golf courses, camp grounds, etc.)	RPA (Town) and wetlands (County)	20%	100%	Estimated acerage in the RPA = 392 Acres. 20% of the floodplain is estimated open space.	Map of open space areas. The community must create an impact adjustment map that delineates open space area, as well as areas subject to open space incentives and low density zoning regulations.	Moderate	Guidance on how to make an impact adjustment map is available HERE.	
			Open space preservation	The percentage is multiplied by 1,450 to obtain the score.		290	1,450	Note: This estimate is reduced significantly because it assumes the Town's floodplain so nly 2016 conserved and n, however, the Town Reby Insa a much higher percentage of conserved was a much higher percentage of conserved with the control of the				
	b	DR	Deed restrictions	Are there conservation easements in SFHA?	Smithfield Boulevard	0	50	There may be conservation easements in the Town, but for the purpose of this Workshop, the will not be included in the points estimate. The focus for the open space preservation activity will be in providing an estimated number of points for the RPA. Each deed restriction individually earns small number of CRS credit points	highlighted. Parcels under l easement must be included on a map.			
	С	NFOS	Natural functions open space	Are some of those parks or other publicly preserved open spaces preserved in or restored to their original natural state? Any endangered or threatened species in the open space areas?	N/A	0	350	The focus for the open space preservation activity will be in providing an estimate furnisher of points for the FPA and wetlands. Credit is available for midple different elements in this activity. Parcels must receive credit under FOSS. A FOSS - parcels designated in a principal state. MFOSS - parcels designated in a plan that state. MFOSS - parcels designated in a plan that products natural inclinois, MFOSS - parcels designated as critical habitat for threatened or endangment genes. MFOSS - parcels because in a designated open space corridor or connected reteroris.	Documentation varies depending on which NFOS credit the community is pursuing, but typically includes creating maps that show where areas are preserved in their natural state, where endangered/threatened species are to coated in the community, etc.	Moderate-High		
	е	CEOS	Coastal erosion open space	Are areas of open space subject to coastal erosion and are there regulations for these erosion areas?	N/A	0	750	This credit is very difficult to earn. Coastal erosion must occur at a rate of 1.5 feet per year or greater. A community must adopt regulations to manage development in this high erosion rate area and the community must create a corresponding map of the areas subject to the high erosion rate.	Areas mapped & copies of relevant regulations or ordinance language	High		

				CRS Quick Check							
			Comn	nunity Name Smithfield State	VA	В	CEGS				
	f	OSI	Open space incentives	Does your community have density transfers or other regulations (TDR, PDR, PUDs, cluster development, etc.) to encourage developers to keep the SFHA as open space?	Cluster subdisvisions allowed through special use permit		20	250	The Town allows for cluster development in its ordinance.	Copy of the relevant ordinance section 8. map of areas subject to regulations.	Moderate
	g	LZ	Low-density zoning	What percentage of your SFHA is zoned for minimum lot sizes of 5 acres or larger? The percentage is multiplied by 300 to obtain the score.	0%	0%	0%	100%	You can only receive credit under LZ activity if you have designated areas in the community that are zoned 5 acre lots or greater. Credit is only available for are located in the SFHA. Areas submitted for OSP do to qualify for LZ credit.	Areas subject to the density restriction (included on the impact adjustment map) & copies of relevant regulations or ordinance language.	Moderate-high
	h	NSP	Natural shoreline protection	Are there any community programs or policies that protect natural channels or shoreline in the community? (local policies for shoreline management on locally owned parks) (RPA would not count twice)	INIA .	, and the second	0	120		Copies of policies or program documents	Moderate
430		DL	Development limitations	Does your community probibit filing or require compensatory storage in all or parts of the SFHA? (Compensatory storage requires the developer to remove a cubic foot of fill for every cubic foot that is brought into the floodplain. The requirement for compensatory storage is not credited if the restriction is limited to the floodway or V Zone.)	N/A - don't think it's in the floodplain overlay district		0	280	Only applies to vacant parcels.	Copy of the relevant ordinance section, inclusion of area subject to regulations	Moderate
	a(2)			Does your community prohibit certain types of buildings from all or parts of the SFHA?	N/A - don't think it's in the floodplain overlay district		0	1,000		Copy of the relevant ordinance section, inclusion	
	a(3)			Does your community prohibit or limit the storage of hazardous materials from all or parts of the SFHA?	N/A		0	50		Copy of the relevant ordinance section, inclusion	
	ь	FRB	Freeboard	Does your community have a freeboard requirement?	Yes, statewide building code		50	500	A new state building code requirement will impose in foot freeboard arross the coastal A zone and VE zone -effective September 2018. The estimate for FIRE uses the total acrosage from the City's VE zone and AE zone (Coastal A Zone acrosage was not exclusited), afthough portions of the AE zone will not be located in the Coastal A. This 50 points is every low estimate of points, as the Coastal A zone acrosage with the coastal A zone acrosage in the town is not known.	document how the regulation is applied.	Moderate
	С	FDN	Foundation protection	Do you have compaction and erosion protection requirements for fill that is used to support buildings? (ex: requiring the use of compacted fill when new buildings built on fill)	No		0	80		Copy of the relevant ordinance section, inclusion	Low
	d	CSI	Cumulative substantial improvements	Do you track building improvements and repairs cumulatively and add the values up to reach the 50% threshold?	N/A - County responsible for tracking improvements		0	90		Copy of the relevant ordinance section, inclusion of area subject to regulations on the impact adjustment map, any development plans and/or permit records that document how the regulation is applied. List of permits issued in SFHA since the last visit.	High
	е	LSI	Lower substantial improvements	Do you define substantial improvement threshold as improvements to structures that are less than 50%? (ex: 2 floods in 10 years with average damage of 25% of building value)	No		0	20		Copy of the relevant ordinance section, inclusion	High
	f	PCF	facilities	Do you require critical facilities to be protected to the 500-year flood level? (prohibited in 500-year floodplain (80pts) or protected to 1 foot freeboard in 500-year floodplain (40pts)) Are their regulations prohibiting building enclosures below BFE (240pts)? Regulations prohibiting breakaway walts/enclosures of areas	No No Ni/A - County		0	80		Copy of the relevant ordinance section, inclusion of area subject to regulations on the impact adjustment map, any development plans and/or permit records that document how the regulation is applied. Copy of the relevant	High An sample nonconversion
	g			>299 sq. ft. below BFE (100pts) Or requiring nonconversion agreements (90 pts inspection once a year; 60 pts inspection anytime; 30 pts no mention of inspection)? Either 240 pts or you can add total of 100 pts + 90 pts.				380		ordinance section, inclusion of area subject to regulations	An sample nonconversion agreement can be downloaded HERE.
	h	BC	Building code	Does your community enforce the International Building and Residential Codes (IBC and IRC)? (20pts IBC; 20pts IRC; 3pts IRC; 3pts IRC; 3pts IRC; 2pts Fuel Gas Code; 2pts Private Sewage Disposal Code) Points based on BCEGS class ratings starting at 515 (10pts 5/5; 20pts 4/4; 30pts 3/2; 40pts 2/2; 50pts 1/1	N/A - County responsible N/A - County responsible		0	50		Impact adjustment map for 430 credit, state law adopting building code, and permit records that document enforcement of code. If the community does not	LLOW
										know your BCÉGS score, ISO will obtain BCEGS class	
	-	LDP	Local drainage protection	Do you have regulations that ensure that every new building will be built to be protected from local drainage flooding? (10 pts for IBC regulation requiring positive drainage away from building site)	IBC		10	120		Copy of the relevant ordinance section, inclusion of area subject to regulations on the impact adjustment map, any development plans and/or permit records that document how the regulation is applied.	Low
	j	MHP		Does the community have regulatory language related to flooding that's enforced in manufactured home parks or subdivisions?	No. Mobile home park district, but not		0	15		Copy of the relevant	Low
			parks		in the SFHA					ordinance section, inclusion	

				CRS Quick Check									
	I 6.	CAZ		nunity Name Smithfield State	VA Yes - through the building code, but	E	BCEGS	500	Desired by the law and a l	C	Dr		
	к	CAZ	Coastal A zones	Does the community have any Coastal A Zones? If so, does the community enforce the new VA building code requiring V zone building standards in the Coastal A Zone? (new higher standard adopted for Fall 2018 building code update)	the Town is not enforcing, the County		150	500	Required by state law under building code update effective Sept 2018; This credit could be reduced	ordinance section, inclusion	Low		
					is responsible.				in future manuals. 200 points is a rough estimate, as the points are dependent upon the size of the	of area subject to regulations on the impact adjustment			
									coastal A Zone in the Town.	map, any development plans			
	- 1	SHR	Special flood-related	Does the community enforce regulations related to development in areas that are subject to a special flood related hazard?	No		0	100		Copy of the relevant	High		
			hazards regulations							ordinance section, inclusion of area subject to regulations			
	n	CER	Coastal erosion	Does the community enforce regulations that are based on coastal erosion mapping AND do the regulations prohibit buildings in 30 year	No		0	370	This credit is very difficult to earn. Coastal	Application for credit for	High		
			regulations	erosion prone areas?					erosion must occur at a rate of 1.5 feet per year or greater. A community must adopt regulations	Section 410 MCE, copy of regulation using the relevant			
									to manage development in this high erosion rate	acronym (CER1 or CER2) in			
									area and the community must create a corresponding map of the areas subject to the	the margins, an explanation of procedures followed for			
									high erosion rate.	enforcement, impact			
										adjustment map showing			
										erosion rates or areas subject to the regulations,			
										development plans and/or permit records that			
										document how the regulation			
										is applied.			
-	р	SMS	State mandated	If any regulations included above are required by the state, you can multiple the points by 10%. CAZ are required by state code, so most	CAZ		20	20		No documentation is	Low		
			regulatory standards	communities will receive the maximum points under this category.						required - ISO Specialist works with the State NFIP			
-	q	RA	Regulations	Enter 5 points for every CFM or graduate of an EMI NFIP course, up to a maximum of 25 points. OR 25 points if all development projects &	Not yet	Tammie is looking into the CFM	0	25			Low-moderate		
	,		administration	final inspections are reviewed/approved by a CFM	,	training and certification				course certificates			
440	а	AMD	Additional map data	Is your FIRM on a local geographic information system (GIS) layer and does the GIS also show streets and parcels?	No	Will happen when GIS position is filled	90	160	Estimate of potential points for AMD1-13	Link to GIS website	Low		
	ь	FM	FIRM maintenance	Have you kept copies of all your old FIRMs, Flood Insurance Studies, etc.?	Probably, but not sure if they are all	illed.	0	15	Communities can only receive credit in this	Indexes from past FIRMs &	Low		
					there.				activity if they have copies of ALL past FIRMs & FIS	Cover of past FISs			
									FIS				
	С	BMM	Benchmark	Are there any benchmarks in the National Spatial Reference System within 1 mile of the SFHA. Benchmarks must be properly maintained.	No.			27		List of benchmarks and/or	l		
	C	DIVIN	maintenance	(Can get credit for BMM1 & BMM2 if areas don't overlap)	No		U	21		CORS, data from	LOW		
										benchmarks (printout of NSRS datasheets)			
-	d	EDM	Erosion data	Does the community get credit under coastal erosion regulations? If yes, does the community update erosion data at least every 5 years?	No		0	20		Description of method used	High		
			maintenance	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						to map erosion rates and	, and a		
										certification that rates/maps are updated/adopted at least			
										every 5 years			
450	а	SMR	Stormwater management	Do you enforce stormwater management regulations - requiring peak runoff from new development to be no greater than runoff from site in its pre-development condition? Development must be regulated to at least parcels 5 acres or more or increases in impervious areas of	N/A - County responsibility (Wayne Griffin)		0	380		Completed stormwater management activity	Low	Use the following checklist to determine	
			regulations	20,000 sq. ft. or more. Must use detention to hold 10 year storm or greater. More credit for regulations that require use of LID techniques	Grillin)					checklist (linked in cell Q88).		what earns CRS credit. If	
				(25pts). More credit for maintenance requirements of facilities (20pts) (Bridgewater 107 pts; Chesapeake 111 pts; Falls Church 131 pts; Portsmouth 116 pts)						Copy of regulations with inclusion of size of		the CRS Coordinator in the community does not	
				ronamous no paj						development regulated,		manage the stormwater	
-	b	WMP	Watershed master	Does the community have a watershed master plan? Plans must evaluate impact of future conditions for multiple storm events (including	No.		0	315		design storms, low impact Completed stormwater	High	program, send the	
		**iVIP	vvatersned master plan	100 year storm), evaluate future conditions using NOAA intermediate high sea level rise curve for 2100, community must evaluate plan	No		U	313		management activity	r ngi i		
	\sqcup	FCC	Free 2	every 5 years	V 2 500 ' : : : : : : : : : : : : : : :			**		checklist (linked in cell Q88). Completed stormwater			
	С	ESC	Erosion & sedimentation	Do you have permit records that show that you require new developments to control erosion from construction projects? (40pts for disturbances 1,000 sq. ft. or more; 30pts for disturbances .5 acres or more; 10pts for disturbances greater than 1 acre.)	Yes - 2,500 square feet requirement in the CBPA		40	40		management activity	LUW		
			control regulations							checklist (linked in cell Q88).			
										Copy of regulations & development/building permit			
										records that show regulation			
	d	WQ	Water quality regulations	Do you have permit records that show that you require new developments of one acre or more to include best management practices to improve water quality. (VA stormwater management regulations require use of BMPs & include a list of BMPs)	N/A - County likely deffered to state		0	20		Completed stormwater management activity	Low		
	\sqcup		regulations							checklist (linked in cell Q88).			
502	а			How many repetitive loss properties are located in your community? (A: Zero; B: 1-49 non-mitigated properties; C: 50 or more non-mitigated) See from above			0	O	Requirements vary for each category	Copy of the repetitive lost list		Guidance on how to map a repetitive loss area is	
510	а	FMP	Floodplain	Have you adopted a floodplain management or hazard mitigation plan that has been approved by FEMA? The Hampton Roads regional	Yes		300	382		The documentation	Low-moderate	A checklist to determine	
			management planning	hazard mitigation plan has been reviewed by ISO and scored at 300 points						requirements for this section are quite extensive and		whether your community's hazard	
			paining							listed in the CRS Manual		mitigation plan or separate	
										starting on page 510-28. If your community participated		floodplain management. plan is eligible for credit is	
										in a regional hazard		available for download	
										mitigation plan there is a chance it was already		HERE.	
										submitted and approved for			
										CRS credit. Check with your ISO Specialist to determine			
										whether the plan has already			
										been rated for CRS credit.			
	ь	RLAA	Repetitive loss area analysis	Has the community conducted a detailed mitigation plan for a repetitive loss area?	No		0	140		Copy of the repetitive loss plan, documentation of the	High		
			,							required notification and			
-	С	NFP	Natural floodplain	Have you adopted a plan to protect aquatic or riparian species or other natural floodolain functions? (examples: green infrastructure plan.	No		0	100	-	analysis release to the Copy of the plan or update to	Moderate		
	٥	INC'P	functions plan	restoration plan, inventory of ecological attributes in watershed/floodplain) Must be updated every 10 years + include an inventory	No		U	100		the plan and a copy of the	Judi ata		
			<u> </u>	species/habitat & protection action items with directed funding & responsible parties.						formal action by governing			

				CRS Quick Check									
-			Comr	nunity Name Smithfield State	VA	BO	CEGS						
520	a-e	All	Acquisition and relocation of buildings	Has the community removed shuctures from the floodplain? Were the structure on the repetitive or severe repetitive loss lists? Were they critical facilities? Were they located in the V Zone or Coastal A Zone? (3 points per acquired structure)	Ne		0	2,250	Credit will be estimated based on responses. Credit will likely be capped at 190 because unarber of acquisitions will be a small percentage of the total number of buildings in the floodplain.	List of cleared buildings, copies of AW501s, and screen shots or photos of before and after pictures of the parcels. Additional documentation is listed in the CRS Manual on page 520- 12.	High		
530	a-c	PB(R), PB(S)	Retrofitted buildings, structural flood control & drainage projects	Does the community have mitigated properties that carry flood insurance? (Examples: elevation, drylwef flood proofing, sewer backup, floodwalls, channel modification, storage facilities) Enter 2 points for every pre-FIRM building that has been elevated voluntarily, up to a maximum of 160 points.	1 house elevated		2	1,600	Credit will likely be capped at 160 because the number of eligible buildings will be a small percentage of the total number of buildings in the floodplain.	List of elevated/mitigated buildings (and elevation certificates), map showing all protected buildings, documentation of the date of each project. Additional	High		
540	а	CDR	Channel debris removal	Do you have a program to regularly inspect streams, ditches, and other channels and to remove debris when found? Are there written records procedures of this program?	Yes		50	200	Record keeping will be key with this credit.	Map of drainage system, inventory of system components, written documentation explaining the program, and records showing inspection schedule	High		
	b	PSM	Problem site maintenance	Do you have a program that gives special attention to known problem flooding areas (that might require more frequent inspections)?	Yes		50	50		Copy of procedure/docs that explain problem site inspection & maintenance, list of problem sites + map, copies of records for sites as requested by ISO			
	С	CIP	Capital improvements program	If you regularly inspect channels, do you have a capital improvements program for drainage improvements?	Yes		35	70		Copy of capital improvements plan noting where drainage	Moderate		
	d	SDR	Stream dumping regulations	If you regularly inspect channels, do you have an ordinance the prohibits dumping debris, junk, grass, etc., in drainage ways?	Yes, but need to confirm with public works		30	30		Copy of the relevant ordinance section	Low		
	е	SBM	Storage basin maintenance	If you regularly inspect channels, do you have a program to regularly inspect storage basins and to remove debris when found?	Yes, but need to confirm with public works		30	120	The Town can only receive this credit if they can meet the credit criteria listed in the CRS Manual at page 540-4 (541.b).	Copy of procedure to inspect storage basins and records showing inspection schedule	Moderate		
610	a	FTR	Flood threat recognition system	Do you have a system for getting notification when flooding is expected (more than latening to the radio)? Do you provide emergency warning alerts and messages to the public when a flood is imminent? Must use more than one channel of	N/A - County emergency N/A - County emergency N/A - County emergency		0	75	To receive credit in 610, you must receive at least some credit in elements a - d. Documentation for this activity is intensive and available on the CRS Manual pg. 610-10. The impact adjustment for activity 610 is extensive most adjustment for activity 610 is extensive most of the control o	(f) A copy of the community's flood hazard description, (2) A copy of the red flood inundation reages; (3) copy of the red flood inundation reages; (3) copy of the red flood inundation reages; (4) copy of the red flood inundation reages; (4) copy of the red flood inundation flood inundation flood inundation flood inundation flood in the flood flood inundation flood in the flood flood inundation flood in the red flood inundation flood in the flood inundation flood in the calculations were determined. Additional documentation is how the numbers of buildings used in the calculations were determined. Additional documentation is how the numbers of buildings used in the calculations were determined. Additional documentation for cycle warmed and the safety measures they should take warmed and the safety measures they should take (a) A copy of the flood	achieve bet boosily has check all the required as documental following do their chest of processing and creat - down	ause the to be sure to be sure to be sure to be sure to be boxes from the pument should plant must be of submitted for C inload HERE.	One of the Jones o
	b	EWD	Emergency warring dissemination	Do you provide emergency warrang alerts and messages to the public when a flood is imminent? Must use more than one channel of delivery	NA - County emergency management (WA Act - include roads notification). Will Drewery (EM.			75	To receive credit in 510, you must receive at beast some credit in elements a - 4. Occumentation for this excitorly is intensive and Documentation for this excitority is intensive and impact adjustment for activity 610 is extensive and dependent on the number of buildings in the Locality that will beneaf from the warrangs. See CRS Manual pg. 610-23 for more information.	(a) A copy of the flood warming and response plan, marked to show where the marked to show where the marked to show where the plan (b) Copies of any within warming materials, such as handouts or the flood inundation map controlled under EWD 10. (c) [For EWD 1, 2, 5, 6, or 7] Accept of the pre-ceptual of the plan (b) Copy of the pre-ceptual of the plan (b) Copy of the pre-ceptual of the plan (b) Copy of the description of a publicly owned cell warming system or a copy of the contract with a privatel provider. (f) For EWD 7] A copy of the description of a publicly owned cell warming system or a copy of the contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider. (f) For EWD 7] A copy of the description of a contract with a privatel provider.	High		

				CRS Quick Check				
			Comr		itate VA		BCEGS	
	С	FRO	Flood response operations	Do you have a flood response plant (or flood annex to the emergency plan) that specifies what happens before and after a flood? Must identify offices responsible for action, define time needed for activity, and a map that refers back to the plan by clear reference (no gen statements)	Town has a flood response plan that may not perfectly meet the requirements, but it could be amende to get the credits		0	0 115
	d	CFP	Critical facilities planning	Do you have a master list of critical facilities in the floodplain and arrangements for special warnings to them?	Town has a flood response plan tha may not perfectly meet the requirements, but it could be amender to get the credits		0	75
	e	SRC	StormReady community	Are you a StormReady community? (see www.stormready.noaa.gov/).	No		0	
620	a-e	LM, LFR, LFW, LFO, LCF	Levee safety	Do you have a levee, a levee maintenance program, and a levee failure warning and response plan (similar to 610 a-d)? Is there an an outreach project sent to properties in the area that would flood if the levee were overtopped?	nual No		0	235
630	а	SDS	State dam safety program	Is your community threatened by a failure of an upstream high-hazard dam? If so, the community can receive credit for the state's dan safety program. (Fairfax, Gloucester 37 pts;	Yes - Smithfield Lake Dam		37	7 45
	b - e	DFR, DFW, DFO, DCF	Dam failure threat recognition system, Dam failure warning, Dam failure response operations, Dam failure critical facilities planning	Do you have a dam failure warning and response plan to notify emergency managers of potential dam failure? Program would be simile 610 a-d. Do you test the warning system at least annually?	r to Unknown		0	115
710				Enter your county's growth rate, i.e., the value for "CGA" from the right column on the "Growth Rates" tab in this Excel file.	1.00	1.00	1.00	1.50
					Total C	0	1,359	
			-	Potential CRS (lace			+

	Copy of flood warning & response plan and copies of documents for credited items not included in plan	High		
	List of critical facilities and information about how warnings are distributed to the locations	High		
his credit is only available if you receive credit in ther activities under 610	Copy of storm ready designation	High		
	Various documentation required for this activity. Not expanded in this document because lack of levees	High		
the community is impacted by a high-hazard am, they are eligible to earn 37 points for the tate of Virginia's state dam safety program.	Documentation assembled by ISO - checklist to help emergency manager identify documentation and map of high hazard dam threat	Low	A documentation checklist for dam safety activities can be accessed HERE.	
he X does not run a test every year	Documentation for these combined activities are listed in the CRS Manual under each element.	Moderate		

This multiplier is likely going to be deleted in future manuals

*This is not an exhaustive list of documentation required by ISO. Please refer to the CRS Manual for a full list of requirements for each activity.